

A CHECKLIST OF PLANTS FOUND GROWING IN A NATIVE OR NATURALISED STATE ON CULEENUP ISLAND, YUNDERUP, WESTERN AUSTRALIA.

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INTRODUCTION

Members of the Western Australian Naturalists' Club have been visiting the islands of the Yunderup delta and keeping records of the flora and fauna since 1967. The first written record of these studies was a collation of observations put together by D.L. Serventy (1970) to correspond with the vesting of Lots 8 and 9, Culeenup Island, in the Club for the purpose of "Field Station". The botanical list, of 67 spp, was organised by E. Kniep and identified by the WA Herbarium.

Further collections during the early 1970s, collated by one of the authors (BMJH) and identified by the WA Herbarium, were published in "The Naturalists' News" in 1974.

Since the completion of the Field Study Centre on the Club's block at Yunderup, numerous opportunistic plant collections have been made. In 1989, two of the authors (D.A. and S.L.) suggested that it was time to collate all the information into a single document, and pay especial attention to naturalised plants, which have increased greatly in number and extent in recent years. Three excursions to further this aim were held during Sept/Oct/Dec 1990, when the island was extensively walked over, attempting to visit every possible location at least once. Mrs A. Annear also contributed a collection made during December 1990. The attached list is the result (see Table 1).

Voucher specimens of all plants collected during 1990 are held in the field herbarium at the Field Study Centre. A specimen of an unidentified *Isolepis* sp has been deposited in the Western Australian Herbarium.

DISCUSSION

The published list of 1970 had 67 plants, of which 9 (13.4%) were introduced. The extra work of 1972/3 brought the total to 160 with 26 (16.3%) introduced. Currently the list stands at 263 spp, with 89 (33.8%) introduced. (17 species previously recorded were not noted in the current survey but have been included in this total list.)

The apparent increase in total numbers of introduced species is possibly not as great as may first appear, as both the earlier studies ignored the disturbed areas adjacent to the houses and the mill, whereas the current one searched those regions specifically.

Nevertheless, it is apparent that the total area dominated by *Watsonia bulbillifera* is increasing rapidly. It now dominates the channel banks and is increasing at a rapid rate in freshwater swamps and ephemeral wetlands. It is inhibited by deep water and salt, and therefore stops at the deep swamp, the ephemeral winter-wet areas around the salt lake and on channel banks to the

west where highly saline water occurs. Within these limitations, without deliberate human interference, it will come to dominate the entire land surface of the island within the next 20 years.

Introduced species

The percentage of introduced species is higher than that recorded for the Perth region as a whole (27%: Marchant et al. 1987) which probably reflects the island's long history of European use and occupation (Richards 1980).

Grain was first brought to the mill in 1847 while at least one of the early occupants of the houses on Murray Terrace kept both sheep and goats. Various grasses, clovers and lupins could have been brought in by these activities. Plants introduced for ornamental reasons have naturalised and some, eg *Amaryllis belladonna*, *Narcissus tazetta* and *Pelargonium x domesticum* have often not spread far. However two recent introductions, *Ferraria crispa* and *Babiana stricta* are increasing very rapidly. *Watsonia bulbifera*, which currently dominates large areas of the island, could have been brought deliberately, or propagules could have been carried downriver from sites upstream. The mode of introduction of other species is more obscure. Keighery (1978) for example, speculates that *Cicendia filiformis* (which was first recorded for WA during the 1972 survey of the island) could have been carried on the feet of birds. This could also apply to such species as *Monopsis simplex* and *Juncus capitatus*, while *Solanum nigrum* could have reached the island inside a bird.

Plants not found in 1990

As stated above, 17 species noted earlier have not been re-recorded in 1990. There are probably several reasons for this:

The plant may have become locally extinct. This may have happened to *Conospermum triplinervium*, however it may still exist as propagules and reappear after fire.

Others, eg *Altemanthera nodiflora*, *Lomandra suaevolens*, and *Wahlenbergia capensis*, flower earlier or later than the visits, and so were missed. Despite extensive searching, only *Centaureum erythraea* was found, not the previously recorded *C. spicata*. However, Marchant et al (1987) records that these two species may have intermediate characteristics, so it is quite possible that a plant near to *C. spicata* could be present.

Six of the orchids collected during Oct 1972 have not been noted since. However, that year was unusual in that, during the previous summer, a severe fire had burnt out almost all the bush on the island and that, coupled with good winter rains, meant that the ephemeral wetlands were carpeted in orchids. Ephemerals on sandy areas were also more abundant, and it is probable that both *Millotia myosotidifolia* and *Podotheca gnaphalioides* both still occur on the island but, being small, escaped notice.

The reed, *Schoenus subfascicularis*, and the twine-rush, *Leptocarpus aristatus*, were also missed, possibly because of superficial similarity to some other species.

An aquatic, *Crassula helmsii*, was not noted, probably because deep wading was not undertaken.

All these plants have been included in the checklist but distinctively marked, so that future observers may look out for them.

In 1974, *Oxalis polyphylla* was recorded as occurring on Culeenup Island. However, a check of specimens held at the WA Herbarium, shows that it has now been transferred to *Oxalis glabra*.

ACKNOWLEDGEMENTS

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Table 1: Checklist of native or naturalised plants on Culeenup Island, Yunderup, Western Australia.

Arrangement follows Marchant *et al* (1987).

* = introduced

§ = not noted during 1990 survey.

OPHIOGLOSSACEAE

Ophioglossum lusitanicum L. Common on the edges of freshwater swamps and ephemeral wetland.

ZAMIACEAE

Macrozamia riedlei (Fischer ex Gaudich.) C. Gardner Occasional on sandy soil.

CUPRESSACEAE

Actinostrobus pyramidalis Miq. Uncommon on sandy soil in swamp.

LAURACEAE

Cassytha racemosa Nees. Common, parasitic on *Melaleuca* spp.

CASUARINACEAE

Casuarina obesa Miq. Major component of fringing forest along all channels and around saltwater swamps.

AIZOACEAE

* *Carpobrotus edulis* (L.) L. Bolus. Common on loose sandy soil.

Carpobrotus virescens (Haw.) Schwantes. Occasional on loose sandy soil.

CHENOPODIACEAE

Atriplex hypoleuca Nees. Common in dense shade at the western end of the island.

§ *Chenopodium glaucum* L. Occurs in swampy areas.

* *Chenopodium murale* L. Occasional on disturbed ground.

Halosarcia halocnemoides (Nees) Paul G. Wilson. Common around salt lake and saline flats.

Halosarcia indica ssp *bidens* (Nees) Paul G. Wilson. Common around margin of salt lake and saline flats.

Halosarcia syncarpa Paul G. Wilson. Uncommon around salt lake and saline flats.

Rhagodia baccata (Labill.) Miq. Common in shade at western end of island.

Sarcocornia quinqueflora (Bunge ex Ung-Stemb.) A.J. Scott. Common around salt lake and saline flats.

Sueda australis (R. Br.) Miq. Occasional on saline flats at western end of island.

Threlkeldia diffusa R. Br. Common around salt lake, saline flats and fringing channels at western end of island.

AMARANTHACEAE

§ *Alternanthera nodiflora* R. Br. Grows on the edge of swamps.

PORTULACACEAE

Calandrinia corrigioloides F. Muell. ex Benth. Occasional on sandy soil.

Calandrinia granulifera Benth. Occasional on sandy soil.

CARYOPHYLLACEAE

* *Cerastrium glomeratum* Thuill. Occasional on disturbed sandy soil.

* *Petrorhagia velutina* (Guss.) P. Ball & Heyw. Common on disturbed sandy soil.

* *Polycarpon tetraphyllum* (L.) L. Occasional on disturbed sandy soil.

* *Silene gallica* L. Common on disturbed sandy soil.

* *Spergulus arvensis* L. Occasional on disturbed sandy soil.

* *Stellaria media* (L.) Villars Uncommon on disturbed sandy soil.

POLYGONACEAE

* *Rumex acetosella* L. Occasional in disturbed areas.

* *Rumex crispus* L. Occasional in disturbed areas.

DROSERACEAE

Drosera gigantea Lindley Occasional on winter-wet soil.

Drosera glanduligera Lehm. Common on winter-wet soil.

Drosera menziesii R. Br. ex DC. Common on winter-wet soil.

Drosera stolonifera Endl. Occasional on winter-wet soil.

FRANKENIACEAE

Frankenia pauciflora DC. Very common around salt lake and on saline flats.

BRASSICACEAE

* *Cakile maritima* Scop. Uncommon on sandy channel edges.

* *Raphanus raphanistrum* L. Occasional on disturbed sandy soil.

PRIMULACEAE

* *Anagallis arvensis* L. Common in disturbed areas.

Samolus junceus R. Br. Common in freshwater swamp.

Samolus repens (Forster & G. Forster) Pers. Grows in swamps.

CRASSULACEAE

Crassula colorata (Nees) Ostenf. Common on sandy soil.

Crassula decumbens Thumb. Common on disturbed winter-wet soil.

§ *Crassula natans* Thumb. Aquatic.

MIMOSACEAE

* *Acacia podalyriaefolia* Cunn. ex Don. Numbers increasing slowly around houses at eastern end of island.

Acacia pulchella R. Br. Occasional on sandy soil. Increases after fire.

Acacia saligna (Labill.) H.L. Wendl. Common on sandy soil.

PAPILIONACEAE

* *Cytisus proliferus* L. f. Numbers increasing from single introduction around houses.

Dillwynia dillwynioides (Meissner) Druce Common around freshwater swamps and winter-wet areas.

Gompholobium tomentosum Labill. Uncommon. Increases after fire.

Hardenbergia comptoniana (Andrews) Benth. Occasional on sandy soil.

Jacksonia furcellata (Bonpl.) DC. Very common on sandy soil.

Jacksonia sternbergiana Huegel Common on sandy soil at eastern end of island.

Kennedia prostrata R. Br. Occasional on sandy soil.

- * *Lotus suaveolens* Pers. Common on disturbed areas of winter-wet soil.
- * *Lupinus angustifolius* L. Common on sandy soil at the eastern end of the island.
- * *Lupinus cosentinii* Guss. Occasional on sandy soil at the eastern end of the island.
- * *Lupinus luteus* L. Uncommon on sandy soil at the eastern end of the island.
- * *Lupinus mutabilis* Sweet. Uncommon on sandy soil at the eastern end of the island.
- * *Medicago polymorpha* L. Uncommon in disturbed sandy soil.
- * *Melilotus indica* (L.) All. Occasional on disturbed sandy soil.
- * *Trifolium campestre* Schreber. Common in disturbed areas.
- * *Trifolium dubium* Sibth. Common in disturbed areas.
- * *Trifolium subterraneum* L. Occasional around houses.
- * *Vicia sativa* L. Occasional on sandy soil.
- Viminaria juncea* (Schrader & Wendl.) Hoffsgg. Very common. Forms dense thickets around swamps and channels.

PROTEACEAE

- Banksia littoralis* R. Br. Uncommon near swamps.
- § *Conospermum triplinervium* R. Br. Grows on sand.
- Hakea prostrata* R. Br. Common on sandy soil.
- Hakea varia* R. Br. Uncommon on winter-wet soil.

HALORAGACEAE

- Gonocarpus nodulosus* Nees. Common in winter-wet meadows.
- Haloragis brownii* (J.D. Hook.) Schindler Common in winter-wet meadows.
- Myriophyllum drummondii* Benth. Occasional in swampy areas.

MYRTACEAE

- Astartea fascicularis* (Labill.) DC. Uncommon around freshwater swamps.
- Calothamnus lateralis* Lindley. Uncommon on sand close to swamps.
- Eucalyptus rudis* Endl. Dominant tree over most of the island.
- Kunzea cricifolia* (Smith) Heynh. Very common on higher sandy ridges.
- Kunzea recurva* Schauer. Uncommon on sand.
- * *Leptospermum laevigatum* (Gaertner) F. Muell. A few plants spreading from a garden at the eastern end of the island.
- Melaleuca cuticularis* Labill. Common around channels and brackish swamps.
- Melaleuca incana* R. Br. Common in swamps.
- Melaleuca raphiophylla* Schauer. Very common in swamps and fringing channels.
- Melaleuca uncinata* R. Br. Common in swamps.
- Melaleuca viminea* Lindley. Very common in swamps.

SANTALACEAE

- Exocarpos sparteus* R. Br. Uncommon on sandy soil.

LORANTHACEAE

- Amycna miquelii* (Lehm. ex Miq.) Tieghem. Uncommon on *Eucalyptus rudis*.
- Lysiana casuarinae* (Miq.) Tieghem. Common on *Casuarina obesa*.

EUPHORBIACEAE

- Poranthura microphylla* Brongn. Occasional on sandy soil.

OXALIDACEAE

- * *Oxalis corniculata* L. Occasional on disturbed sandy soil.
- * *Oxalis glabra* Thunb. Occasional around houses.
- * *Oxalis pes-caprae* L. Common in disturbed ground.
- * *Oxalis purpurea* L. Common on sandy soil around houses.

GERANIACEAE

- * *Erodium botrys* (Cav.) Bettol. Occasional on disturbed soil.
- * *Geranium molle* L. Occasional among grass swards or meadows.
- * *Pelargonium x domesticum* L. One population on sandy soil near houses.

APIACEAE

- Apium prostratum* Labill. ex Vent. Occasional in shady areas at the western end of the island.
- Erygium rostratum* Cav. Common on winter-wet soil.
- Homalosciadium homalocarpum* (F. Muell.) H. Eichler. Common in the shade of low shrubs around swampy areas.

- Hydrocotyle alata* A. Rich. Very common in winter-wet areas.
Hydrocotyle diantha DC. Common on winter-wet soil.
Trachymene coenulea R.A. Graham. Grows on sand.
Trachymene pilosa Smith. Common on sandy soil.

GENTIANACEAE

- * *Centaurium erythraea* Rafn. Common on disturbed soil.
- *s *Centaurium spicatum* (L.) Fritsch ex Janchen. Grows in disturbed areas.
- * *Cicendia filiformis* (L.) Delarbre. Abundant on winter-wet soil.

SOLANACEAE

- Anthocercis littorea* Labill. Uncommon on sandy soil.
- * *Solanum nigrum* L. Occasional on disturbed ground.

MENYANTHACEAE

- Villarsia capitata* Nees. Common in swamps.

LAMIACEAE

- * *Stachys arvensis* (L.) L. Common on disturbed ground.

SCROPHULARIACEAE

- * *Dischisma arenarium* E. Meyer. Uncommon on disturbed sandy soil.
- Glossostigma diandrum* (L.) Kuntze. Occasional in swamps.
- Gratiola peruviana* L. Occasional in winter-wet areas.
- * *Parentucellia viscosa* (L.) Caruel. Occasional in disturbed areas.

MYOPORACEAE

- Myoporum caprarioides* Benth. Common along the river channels.

OROBANCHACEAE

- * *Orobanche minor* Smith. Uncommon on sandy soil.

LENTIBULARIACEAE

- Polypompholyx multifida* (R. Br.) Muell. Abundant in winter-wet meadows.

CAMPANULACEAE

- *s *Wahlenbergia capensis* (L.) A. DC. Grows on sandy soil.

LOBELIACEAE

- Lobelia alata* Labill. Occasional in swampy areas.
- Lobelia tenuior* R. Br. Occasional on sandy soil.
- * *Monopsis simplex* (L.) F. Wimmer Common on winter-wet soil.

STYLIDIACEAE

- Stylidium brunonianum* Benth. Occasional in winter-wet soil.
- Stylidium calcaratum* R. Br. Common on winter-wet soil.
- Stylidium divaricatum* Sonder. Common on non-brackish winter-wet soil.
- Stylidium inundatum* R. Br. Abundant on winter-wet soil.
- Stylidium roseo-album* R. Ericson & J.H. Willis. Occasional on winter-wet soil.
- Stylidium utricularioides* Benth. Occasional on winter-wet soil.

GOODENIACEAE

- Anthotium humile* R. Br. Occasional in swamp.
- Dampiera trigona* Vriese. Abundant in swampy and winter-wet areas.
- Goodenia filiformis* R. Br. Common in winter-wet areas.

RUBIACEAE

- * *Galium divaricatum* Pourret ex Lam. Occasional in winter-wet areas.
- Opercularia vaginata* Labill. Occasional on sandy areas.

ASTERACEAE

- Angianthus dummondii* (Turcz.) Benth. Common in winter-wet areas.
- * *Arctotheca calendula* (L.) Levyns. Occasional in disturbed sandy areas.
- * *Aster subulatus* Michaux Common in dense shade on the western end of the island.
- Brachycome bellidoides* Steetz. Abundant in winter-wet areas.
- * *Conyza bonariensis* (L.) Cronq. Occasional on sandy soil.
- Cotula coronopifolia* L. Very common on swamp edges.
- Cotula cotuloides* (Steetz) Druce Very common on swamp edges.

- * *Cotula turbinata* L. Common in disturbed sandy areas.
- * *Crepis vesicaria* L. Uncommon in dense shade under wattle on sand.
- * *Dittrichia graveolens* (L.) Greuter. Common on disturbed ground.
- * *Hypochaeris glabra* L. Abundant all over island.
- § *Millotia mysosidifolia* (Benth.) Steetz. Grows on sandy soil.
- Myriocephalus helichrysoides* A. Gray. Grows on winter-wet soil.
- § *Podotheca gnapthioides* R.A. Graham. Grows on sandy soil.
- Podolepis gracilis* (Lehm.) R.A. Graham. Locally common on non-saline winter-wet soil.
- Pogonolepis stricta* Steetz. One population on sand at edge of saline flat at western end of island.
- * *Pseudognaphalium luteoalbum* (L.) Hilliard & B.L. Burtt. Uncommon on disturbed sandy soil.
- Quintetia urvillei* Cass. Abundant on winter-wet soil, especially around swamps.
- Rutidiosis multiflora* (Nees) Robinson. Very common on winter-wet soil.
- Senecio laevis* G. Forster ex Willd. Occasional on sandy soil.
- Siloxerus humifusus* Labill. Locally common on non-saline winter-wet soil.
- * *Soliva pterosperma* (A.L. Juss.) Less. Widespread in lawns and along paths near houses.
- * *Sonchus asper* Hill. Occasional in disturbed areas.
- * *Sonchus oleraceus* L. Common in disturbed areas.
- * *Ursina anthemoides* (L.) Poiret. Very common on sandy soil.
- Waitzia citrina* (Benth.) Steetz. Very common on sandy soil.

JUNCAGINACEAE

- Triglochin calcitrapa* Hook. Very common in ephemeral swamps.
- Triglochin centrocarpa* Hook. Common in ephemeral swamps.
- Triglochin mucronata* R. Br. Common in ephemeral swamps.
- Triglochin procera* R. Br. Common in freshwater swamp with deep water.
- Triglochin striata* Ruiz Lopez & Pavon. Common in ephemeral swamps.

POTAMOGETONACEAE

- Ruppia maritima* L. Common in salt lake.

ARACEAE

- Zantedeschia aethiopica* (L.) Sprengel. Uncommon in deep shade.

DASYPOGONACEAE

- § *Lomandra suaveolens* (Endl.) Ewart. Grows on sandy soil.

PHORMIACEAE

- Dianella divaricata* R. Br. Uncommon on sandy soil.

ANTHERICACEAE

- Arthropodium capillipes* Endl. Common on sandy soil.
- Borya scirpoidea* Lindley. Occasional in winter-wet areas.
- Caesia parviflora* R. Br. Common on sandy soil.
- Chamaescilla corymbosa* (R. Br.) F. Muell. ex Benth. Common on sandy soil.
- Corynotheca micrantha* (Lindley) J.F. Macbride. Occasional on sandy soil.
- Sowerbaea laxiflora* Lindley. Very common on sandy soil.
- Thysanotus manglesianus* Kunth. Common on sandy soil.
- Thysanotus* sp. Common in winter-wet areas.
- Tricoryne eliator* R.Br. Uncommon on sandy soil.

ASPHODELACEAE

- Bulbine semibarbata* (R. Br.) Haw. Uncommon in damp shady areas.

AMARYLLIDACEAE

- * *Amaryllis belladonna* L. Increasing slowly near houses.
- * *Narcissus tazetta* L. Increasing slowly near houses.

COLCHICACEAE

- Burchardia multiflora* Lindley. Common on winter-wet soil.

IRIDACEAE

- * *Babiana stricta* (Aiton) Ker Gawler. Locally dominant in two dense populations near houses.
- * *Fernaria crispa* Burman. Very common in disturbed sand.

- * *Freesia affleichtlinii* Klatt. Uncommon around houses.
- * *Gladiolus undulatus* L. Occasional in non-saline wet areas.
- * *Homeria flaccida* Sweet. Common on disturbed ground.
- * *Ixia maculata* L. Small population near one house.
- * *Patersonia occidentalis* R. Br. Uncommon on sandy soil.
- * *Romulea flava* (Lam.) De Vos. Uncommon on sandy soil.
- * *Romulea rosea* (L.) Ecklon. Common on sandy soil.
- * *Tritonia lineata* (Salish.) Ker Gawler. Small population near one house.
- * *Watsonia bulbillifera* J. Mathews & I Bolus. Dominates the ground layer around fringing channels. Increasingly dominant dense populations on sand and winter-wet soil, except in saline areas.

ORCHIDACEAE

- Caladenia deformis* R. Br. Occasional on winter-wet soil.
- Caladenia flava* R. Br. Common on sandy soil.
- Caladenia gemmata* Lindley. Occasional on sandy soil.
- Caladenia huegelii* H.G. Reichb. Occasional on winter-wet soil.
- Caladenia latifolia* R. Br. In shady areas on sandy soil.
- § *Caladenia longicaudata* Lindley. Grows on sand.
- Caladenia marginata* Lindley. Occasional on sandy soil.
- Caladenia menziesii* R. Br. Occasional on sandy winter-wet areas.
- § *Caladenia* sp B (*filamentosa*) R. Br. Grows on winter-wet ground.
- Diuris laxiflora* Lindley. Common on winter-wet soil.
- Diuris longifolia* R. Br. Occasional in sandy areas.
- § *Elythranthera brunonis* (Endl.) A.S. George. Occasional on sandy soil.
- § *Elythranthera emarginata* (Lindley) A.S. George. Occasional on winter-wet soil.
- Lyperanthus nigricans* R. Br. Occasional in shady areas.
- Microtis orbicularis* R.S. Rogers. Common in winter-wet areas.
- Microtis unifolia* (G. Forster) H.G. Reichb. Common in winter-wet areas.
- * *Monadenia bracteata* (Sw.) T. Durand & Schinz. Locally common around houses at eastern end of island.
- Prasophyllum macrostachyum* R. Br. Occasional in winter-wet areas.
- Prasophyllum ovale* Lindley. Occasional at edges of winter-wet depressions.
- § *Pterostylis nana* R. Br. Occasional in shady areas.
- Thelymitra antennifera* (Lindley) J.D. Hook. Occasional on winter-wet areas.
- Thelymitra flexuosa* Endl. Uncommon at edges of winter-wet depressions.
- § *Thelymitra pauciflora* R. Br. Uncommon in winter-wet areas.

HAEMODORACEAE

- Anigozanthos viridis* Endl. Occasional on winter-wet soil.
- Conostylis aculeata* R. Br. Abundant on undisturbed sandy soil.
- Haemodorum simplex* Lindley. Occasional on winter-wet soil.
- Haemodorum spicatum* R. Br. Occasional on winter-wet soil.
- Tribonanthes australis* Endl. Common in winter-wet meadows.
- Tribonanthes violaceae* Endl. Common in winter-wet meadows.

PHILYDRACEAE

- Philydrella pygmaea* (R. Br.) Caruel. Common in winter-wet areas.

COMMELINACEAE

- Cartonema philydroides* F. Muell. Uncommon on undisturbed sandy soil at eastern end of island.

JUNCACEAE

- Juncus bufonius* L. Occasional in winter-wet areas.
- * *Juncus capitatus* Weigel. Common on winter-wet soil.
- Juncus kraussii* Hochst. Common at edges of channels, on salt flats and around salt lake.
- Juncus subsecundus* Wakef. Occasional in winter-wet swamps.

CYPERACEAE

- Carex fascicularis* Sol. ex Boott. Locally common around salt lake and on salt flats.
- Gahnia trifida* Labill. Common around salt lake and at edges of river channels.
- Isolepis marginata* (Thunb.) A. Dietr. Common in winter-wet meadows.
- Isolepis nodosa* (Rottb.) R. Br. Occasional along river channels.

- Isolepis oldfieldiana* (S.T. Blake) K.L. Wilson. Occasional in winter-wet areas.
Isolepis setiformis (S.T. Blake) K.L. Wilson Occasional in swamp.
Isolepis sp. Common in winter-wet areas.
Lepidosperma longitudinale Labill. Occasional in winter-wet areas.
Lepidosperma tenue Benth. Occurs in a winter-wet section of path on south side of island.
Schoenus rigens S.T. Blake. Grows in non-saline winter-wet depressions.
 § *Schoenus subfascicularis* Kuek. Grows in winter-wet depressions.

RESTONIACEAE

- § *Leptocarpus aristatus* R. Br. Grows in winter-wet depressions.
Leptocarpus coangustatus Nees. Widespread and locally abundant in swamps and winter-wet depressions.

CENTROLEPIDACEAE

- Aphelia cyperoides* R. Br. Common in winter-wet meadows.
Centrolepis aristata (R. Br.) Roemer & Schultes. Abundant in winter-wet areas.
Centrolepis drummondiana (Nees) Walp. Common in winter-wet areas.
Centrolepis glabra (F. Muell. ex Sonder) Heiron. Common in winter-wet areas.

POACEAE

- * *Aira caryophylla* L. Common in sandy areas.
- * *Avena fatua* L. Common in disturbed areas.
- * *Briza maxima* L. Abundant on disturbed sandy soil.
- * *Briza minor* L. Common on disturbed sandy soil.
- * *Bromus diandrus* Roth. Locally common around houses.
- * *Bromus hordeaceus* L. Occasional around houses.
- * *Cynodon dactylon* (L.) Spreading from lawns around houses.
- Danthonia racemosa* R. Br. Occasional on sandy soil.
- * *Ehrharta calycina* Smith. Common in sandy areas.
- * *Ehrharta longiflora* Smith. Common in shady disturbed sandy soil.
- * *Hordeum leporinum* Link. Occasional on disturbed sandy soil at western end of island.
- * *Lagurus ovatus* L. Very common in sandy areas.
- * *Lolium perenne* L. Common around houses at eastern end of island.
- * *Lolium rigidum* Gaudin. Occasional around houses at eastern end of island.
- Microlaena stipoides* (Labill.) R. Br. Occasional in sandy areas.
- * *Pennisetum clandestinum* Hochst. ex Chiov. Occasional around houses.
- * *Piptatherum miliacum* (L.) Cosson. Occasional on disturbed channel bank near houses.
- * *Poa annua* L. Common around houses.
- * *Polypogon monspeliensis* (L.) Desf. Occasional in disturbed wet areas.
- * *Sporobolus virginicus* (L.) Kunth. Occasional on salt flats.
- * *Stenotaphrum secundatum* (Walter) Kuntze. Occurs around houses.
- Stipa campylachne* Nees. Occasional in winter-wet sandy soil.
- Stipa compressa* R. Br. Uncommon on sandy soil.
- Stipa flavesccns* Labill. Uncommon on sandy soil.
- * *Vulpia myuros* (L.) C. Gmelin. Occasional around houses.

ANNOTATED LIST OF THE BIRDS OF DORRE ISLAND

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ABSTRACT

Twenty six species of birds were recorded on the island, including 7 new species, in October 1988. All new species, except the Bush Stone-curlew and Red-capped Plover are summer migrants to Australia. A total of 31 species (22 non-passerines and 9 passerines) have now been recorded on the island over the past 80 years.

Of the five vegetation types on the island, the tall scrub community supports the highest diversity of terrestrial species. In the other four vegetation types, most species appear to be restricted to areas where tall shrubs occur. Only the Calamanthus, Welcome Swallow and Richard's Pipit, appear not to require at least some tall shrubs.